



US009085897B2

(12) **United States Patent**
Quine

(10) **Patent No.:** **US 9,085,897 B2**

(45) **Date of Patent:** **Jul. 21, 2015**

(54) **SPACE ELEVATOR**

USPC 244/158.5; 52/2.13, 2.21, 2.22
See application file for complete search history.

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(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 979 days.

(21) Appl. No.: **12/524,130**

(22) PCT Filed: **Feb. 21, 2008**

(86) PCT No.: **PCT/CA2008/000340**

§ 371 (c)(1),
(2), (4) Date: **Mar. 2, 2010**

(87) PCT Pub. No.: **WO2008/101346**

PCT Pub. Date: **Aug. 28, 2008**

(65) **Prior Publication Data**

US 2010/0163683 A1 Jul. 1, 2010

(51) **Int. Cl.**

B64G 5/00 (2006.01)

E04B 1/98 (2006.01)

B66B 9/00 (2006.01)

B64G 1/00 (2006.01)

(52) **U.S. Cl.**

CPC **E04B 1/985** (2013.01); **B64G 1/002**
(2013.01); **B64G 5/00** (2013.01); **B66B 9/00**
(2013.01)

(58) **Field of Classification Search**

CPC **E04B 1/985**

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(57) **ABSTRACT**

A freestanding space elevator tower for launching payloads, tourism, observation, scientific research and communications. The space elevator tower has a segmented elevator core structure, each segment being formed of at least one pneumatically pressurized cell. The pressure cells may be filled with air or another gas. Elevator cars may ascend or descend on the outer surface of the elevator core structure or in a shaft on the interior of the elevator core structure. A payload may be launched from a pod or deck at the upper end of the space elevator tower. The space elevator tower is stabilized by gyroscopic and active control machinery. The space elevator tower maintains a desired pressure level through gas compressor machinery. Methods of constructing the space elevator are also disclosed.

27 Claims, 11 Drawing Sheets

